Please find below a communication from the EXAMINER in charge of this application.

Commissioner of Patents

See attached office Action

AYAZ R. SHEIKH
PATENT EXAMINER
GROUP 2300

☐ Responsive to communication(s) filed on _____ .

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire ____*3*____ month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

    ☒ Claim(s) *1-19*_____ is/are pending in the application.

        Of the above, claim(s) _____ is/are withdrawn from consideration.

    ☐ Claim(s) _____ is/are allowed.

    ☒ Claim(s) *1-19*_____ is/are rejected.

    ☐ Claim(s) _____ is/are objected to.

    ☐ Claims _____ are subject to restriction or election requirement.

Application Papers

    ☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

    ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

    ☐ The proposed drawing correction, filed on _____ is ☐approved ☐disapproved.

    ☐ The specification is objected to by the Examiner.

    ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

    ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

        ☐All ☐Some* ☐None   of the CERTIFIED copies of the priority documents have been

        ☐ received.

        ☐ received in Application No. (Series Code/Serial Number) _____ .

        ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

      *Certified copies not received: _____ .

    ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

    ☒ Notice of References Cited, PTO-892

    ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

    ☐ Interview Summary, PTO-413

    ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

    ☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Part III   DETAILED ACTION

Specification

1.   The disclosure is objected to because of the following informalities:

-      Cross reference to related applications does not contain the serial number, or

       title, or the filing date of the related application.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. § 103 which forms the basis for all
obviousness rejections set forth in this Office action:

> A patent may not be obtained though the invention is not identically disclosed
> or described as set forth in section 102 of this title, if the differences
> between the subject matter sought to be patented and the prior art are such
> that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said
> subject matter pertains. Patentability shall not be negatived by the manner in
> which the invention was made.

> Subject matter developed by another person, which qualifies as prior art only
> under subsection (f) or (g) of section 102 of this title, shall not preclude
> patentability under this section where the subject matter and the claimed
> invention were, at the time the invention was made, owned by the same
> person or subject to an obligation of assignment to the same person.

3.   Claims 1-19 are rejected under 35 U.S.C. § 103 as being unpatentable over

Stefanopoulos et al.,(5,333,237) and in view of Schmandt et al.,("Augmenting a

Window System with Speech Input", Computer Magazine, 8/90, Vol.23, Issue 8,

pages 50-56).

As per claim 1, Stefanopoulos et al., teach a hypermedia structured

knowledge base system comprising:

a browsing module (Fig. 3g, Col.5, lines 27-34);

an information resource (Fig. 3c-3f, Col. 5, lines 17-35);

but Stefanopoulos et al., specifically do not teach a speech user agent.

However, Schmandt et al., on the other hand teach an interface that uses speech or

voice to navigate in a window environment (page 52, Fig.1, page 50, paragraph 2).

It would have been obvious to one having ordinary skill in the art at the time

the invention was made, to use the method of using speech to navigate in a windows

environment as taught by Schmandt et al., and incorporating it into the hypermedia

structured knowledge base system as taught by Stefanopoulos et al., to obtain a

speech interface to the Web that allows easy access to information on the Web by

reducing manual, intervention (i.e., the use of keyboard), and which is user friendly.

Claims 2 and 6 are rejected, as applied to claim 1 above, and furthermore,

Stefanopoulos teaches embedded intelligence in a hypermedia source (abstract), and

an instructional module for communicating allowed actions by a user (Fig. 4h, Col.6,

lines 55-68, Figs.5a-5g, Col.7, lines 19-23).

Claim 3 is rejected, as applied to claim 2 above, and furthermore,

Stefanopoulos includes means for processing user action based on embedded

intelligence (Fig. 4g, Col.6, lines 52-54).

Claim 4 is rejected, as applied to claim 3 above, and furthermore,

Stefanopoulos includes the means for returning a result of said actions to the user

(Fig.4g, Col.6, lines 52-54).

Claim 5 is rejected, as applied to claim 2 above, and furthermore, it would

have been obvious to one with ordinary skill in the art that the use of HTML page as

hypermedia source is old and well known in a hypermedia environment.

Claims 7 and 8 are rejected, as applied to claim 2 above, and furthermore,

Schmandt et al., teach a speech recognizer (page 50, paragraph 2), and it would

have been obvious to one with ordinary skill in the art that the use of embedded

grammar is inherent in a speech recognizer.

Claim 9 is rejected, as applied to claim 7 above, and furthermore, and it would

have been obvious to one with ordinary skill in the art that in a speech recognizer

dynamic addition of grammar is inherent.

Claim 10 is rejected, as applied to claim 3 above, and furthermore, Schmandt

teaches speech recognizer dependent actions (page 50, paragraph 2), and it would

have been obvious to one having ordinary skill in the art at the time the invention was

made, to use the method of using speech to navigate in a windows environment as

taught by Schmandt et al., and incorporating it into the hypermedia structured

knowledge base system as taught by Stefanopoulos et al., to obtain a speech

interface to the Web that allows easy access to information on the Web by reducing

manual, intervention (i.e., the use of keyboard).

As per claim 11, Stefanopoulos et al., teach a hypermedia structured

knowledge base system comprising:

a browsing module (Fig. 3g, Col.5, lines 27-34);

an information resource (Fig. 3c-3f, Col. 5, lines 17-35);

but Stefanopoulos et al., specifically do not teach a speech user agent.

However, Schmandt et al., on the other hand teach an interface that uses speech or

voice to navigate in a window environment (page 52, Fig.1, page 50, paragraph 2).

The use of grammar is old and well known in the art of speech recognition as a

means of optimization which is highly desirable.

It would have been obvious to one having ordinary skill in the art at the time

the invention was made, to use the method of using a speech recognizer and

processing the data to navigate in a windows environment as taught by Schmandt et

al., and incorporating it into the hypermedia structured knowledge base system as

taught by Stefanopoulos et al., to obtain a speech interface to the Web that allows

easy access to information on the Web by reducing manual, intervention (i.e., the

use of keyboard), and which is user friendly.

Claims 12 and 13 are rejected as applied to claim 11 above, and

furthermore, Schmandt et al., teach tokenizing a title and dynamic addition of

grammar to a speech recognizer (page 53, Col. last paragraph, Col.3, first and second paragraphs).

It would have been obvious to one having ordinary skill in the art at the time the invention was made, to use the method of using a speech recognizer and processing the data to navigate in a windows environment as taught by Schmandt et al., and incorporating it into the hypermedia structured knowledge base system as taught by Stefanopoulos et al., to obtain a speech interface to the Web that allows easy access to information on the Web by reducing manual, intervention (i.e., the use of keyboard), and which is user friendly.

As per claim 14, Stefanopoulos et al., teach a hypermedia structured knowledge base system comprising:

a browsing module (Fig. 3g, Col.5, lines 27-34);

an information resource (Fig. 3c-3f, Col. 5, lines 17-35);

textual representation of links to said information source (Figs. 4c-4d, 5b, 5e, Col. 6, lines 32-42, Col.7, lines 18-38);

but Stefanopoulos et al., specifically do not teach a speech user agent. However, Schmandt et al., on the other hand teach an interface that uses speech or voice to navigate in a window environment (page 52, Fig.1, page 50, paragraph 2). The use of grammar is old and well known in the art of speech recognition as a means of optimization which is highly desirable.

It would have been obvious to one having ordinary skill in the art at the time the invention was made, to use the method of using a speech recognizer and processing the data to navigate in a windows environment as taught by Schmandt et al., and incorporating it into the hypermedia structured knowledge base system as taught by Stefanopoulos et al., to obtain a speech interface to the Web that allows easy access to information on the Web by reducing manual, intervention (i.e., the use of keyboard), and which is user friendly.

Claims 15 - 18 are rejected as applied to claim 14, and furthermore, Schmandt et al., teach the means of recognizing and dynamic addition of grammar to a speech recognizer (page 53, Col. last paragraph, Col.3, first and second paragraphs).

It would have been obvious to one having ordinary skill in the art at the time the invention was made, to use the method of using a speech recognizer and processing the data to navigate in a windows environment as taught by Schmandt et al., and incorporating it into the hypermedia structured knowledge base system as taught by Stefanopoulos et al., to obtain a speech interface to the Web that allows easy access to information on the Web by reducing manual, intervention (i.e., the use of keyboard), and which is user friendly.

Claim 19 is rejected as applied to claim 17 above, and furthermore, the use of a dictionary lookup is old and well known in the art of speech recognition.

Conclusion

4.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

Ellershaw, ("The paperless, wireless, peopleless office? Technology Trends in the

Office", Telecommunication Journal of Australia, 1989, Vol.39, No.3, pages 11-16].

Arons ("hyperspeech: Navigating in Speech only Hypermedia", Third ACM

Conference on Hypertext Proceedings, December 15-18, 1991].

Potts et al., [" An active Hypertext Model for system Requirements", Software

Specification and Design, 1993, pages 62-68].

Bretherton et al., ["Metadata: a user's view", Scientific and Statistical

Database, 1994 7th International Working Conference, 2/94, pages 166 - 174].

Stock ("Natural Language in Multimodal Human-Computer Interfaces", IEEE Expert

Magazine, 4/94, Vol. 9, Issue 2, pages 40-44].

Bernstein et al., [5,204,947] teach application independent hypermedia enablement

services.

Bernstein et al., [5,297,249] teach hypermedia link marker abstract and search

services.

Pagallo et al., [5,317,647] teach constrained attribute grammars for syntactic

pattern recognition.

Lewis (5,355,472) teach a system for substituting tags for non-editable data sets in

hypertext documents and updating web files containing links between data sets

corresponding to changes made to the tags.

Cohen-Levy et al., (5,423,034) teach network file management with user

determined hierarchical file structures and means for intercepting application

program open and save commands for inputting and displaying user inputted

descriptions of the location and content of files.

Kaplan et al., (5,446,891) teach a system for adjusting hypertext links with weighed

user goals and activities.

Stanford et al., (5,513,298) teach instantaneous context switching for speech

recognition systems.

Matheny et al., (5,479,601) teach a method and apparatus for processing

commands generated by user interface controls in an atomic manner.

Balogh et al., (5,493,677) teach generation, archiving, and retrieval of digital images

with evoked suggestion-set captions and natural language interface.

Krause (5,526,520) teach a method to organize and manipulate blueprint

documents using hypermedia links from a primary document to recall related

secondary documents.

5.   Any inquiry concerning this communication or earlier communications from
the examiner should be directed to Vijay Chawan whose telephone number is
(703)305-3836.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allen R. MacDonald, can be reached at (703)305-9708. The facsimile phone number for this group is (703)308-5356.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group Receptionist whose telephone number is (703)305-9600.

AYAZ R. SHEIKH
PATENT EXAMINER
GROUP 2300

Vijay Chawan
August 1, 1996